



Water-Data Report 2008

01411400 FISHING CREEK AT RIO GRANDE, NJ

FISHING CREEK BASIN

LOCATION.--Lat 39°01'39", long 74°53'47" referenced to North American Datum of 1983, Middle Township, Cape May County, NJ, Hydrologic Unit 02040206, at bridge on State Route 47 at Wildwood Pumping Station, 1.4 mi northwest of Rio Grande, and 2.7 mi upstream from mouth.

DRAINAGE AREA.--2.29 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1965-72, 1990-92. Miscellaneous measurements, water years 1998 to current year.

GAGE.--Staff gage.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Date	Discharge, in ft ³ /s
Nov 13, 2007	0.32
Feb 7, 2008	0.48
Aug 12, 2008	0.50

01411400 FISHING CREEK AT RIO GRANDE, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water year 1965, 1998 to current year.

REMARKS.--Cooperative Network Site Descriptor: Undeveloped Land Use Indicator and Statewide Status, NJ Department of Environmental Protection Watershed Management Area 16.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Time	Sample medium and type	Turbdty white light, det ang 90+/-30 instantaneous discharge, ft3/s (00061)	UV absorb- ance, 254 nm, wat flt corrctd NTRU (63676)	UV absorb- ance, 280 nm, wat flt units (50624)	Baro- metric pres- sure, /cm (61726)	Dissolved oxygen, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of sat- uration (00301)
Nov 13...	1100	Surface water, regular	.32	.9	.378	.286	761	11.1	97
Feb 07...	1200	Surface water, regular	.48	2.1	.674	.524	753	8.7	80
Jun 11...	1120	Surface water, regular	.29	1.8	.543	.423	766	6.4	84
Aug 12...	1120	QC - Artificial, field blank	--	--	--	--	--	--	--
12...	1140	Surface water, regular	.50	5.4	.342	.251	759	11.9	148

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, mg/L (00915)	Magnes- ium, water, mg/L (00925)	Potas- sium, water, mg/L (00935)	Sodium, water, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, mg/L (00940)	Fluor- ide, water, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)
Nov 13...	7.0	231	11.5	9.3	68	17.5	5.95	2.16	14.5	20	22.1	<.12	2.5
Feb 07...	6.4	164	11.5	11.2	49	12.9	4.19	1.33	12.1	18	18.0	<.12	7.4
Jun 11...	6.8	148	28.0	29.3	42	11.5	3.26	1.32	11.8	26	19.6	<.12	2.0
Aug 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	8.1	192	25.5	26.5	54	14.4	4.50	2.38	17.3	38	29.4	<.12	.6

01411400 FISHING CREEK AT RIO GRANDE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Sulfate water, filtrd, mg/L (00945)	Residue water, filtrd, sum of constituents mg/L (70301)	Residue on evap. 180degC wat flt mg/L (70300)	Residue total non-filter- able, mg/L (00530)	Ammonia + org-N, water, filtrd, mg/L as N (00623)	Ammonia + Ammonia water, filtrd, mg/L as N (00608)	Nitrate + nitrite water filtrd, mg/L as N (00631)	Partic- ulate nitro- gen, susp, water, filtrd, mg/L (49570)	Total nitro- gen, water, filtrd, mg/L (00602)	Total nitro- gen, water, unfiltrd, mg/L (00600)	Ortho- phos- phate, water, filtrd, mg/L as P (00671)	Phos- phorus, water, filtrd, mg/L as P (00666)	Phos- phorus, water, unfiltrd mg/L as P (00665)
Nov 13...	46.3	E123	149	1	.51	.030	E.02	.06	E.53	E.58	E.004	.009	.018
Feb 07...	26.4	E94	128	1	.49	.016	.19	.05	.68	.73	E.004	.009	.020
Jun 11...	8.78	E74	126	3	.76	E.026	<.04	.18	--	--	<.010	.018	.032
Aug 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	14.1	E105	138	6	.65	E.003	<.04	.05	--	--	E.005	.011	.027

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Total carbon, susnd sedimnt total, mg/L (00694)	Inor- ganic carbon, susnd sedimnt total, mg/L (00688)	Organic carbon, susnd sedimnt total, mg/L (00689)	Organic carbon, water, filtrd, mg/L (00681)	Arsenic water, filtrd, µg/L (01000)	Arsenic water, unfiltrd, µg/L (01002)	Barium, water, unfiltrd recover -able, µg/L (01007)	Beryll- ium, water, unfiltrd recover -able, µg/L (01012)	Boron, water, unfiltrd recover -able, µg/L (01020)	Boron, water, unfiltrd recover -able, µg/L (01022)	Cadmium water, unfiltrd recover -able, µg/L (01027)	Chrom- ium, water, unfiltrd recover -able, µg/L (01034)	Copper, water, filtrd, µg/L (01040)
Nov 13...	.4	<.04	.3	10.2	--	--	--	--	32	--	--	--	--
Feb 07...	.5	<.04	.5	14.2	.30	E.42	21.0	.04	25	27	<.01	E.25	--
Jun 11...	1.3	M	1.3	21.0	--	--	--	--	27	--	--	--	--
Aug 12...	--	--	--	--	<.06	--	--	--	--	--	--	--	<1.0
12...	.4	<.04	.4	11.4	.69	.73	15.0	<.04	33	31	<.01	<.40	--

01411400 FISHING CREEK AT RIO GRANDE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 5 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Mangan-											
	Copper, water, unfltrd recover -able, µg/L (01042)	Iron, water, unfltrd recover -able, µg/L (01045)	Lead, water, unfltrd recover -able, µg/L (01049)	Lead, water, unfltrd recover -able, µg/L (01051)	ese, water, unfltrd recover -able, µg/L (01055)	Mercury, water, unfltrd recover -able, µg/L (71890)	Mercury, water, unfltrd recover -able, µg/L (71900)	Nickel, water, unfltrd recover -able, µg/L (01065)	Nickel, water, unfltrd recover -able, µg/L (01067)	Selenium, water, unfltrd recover -able, µg/L (01147)	Silver, water, unfltrd recover -able, µg/L (01077)	Zinc, water, unfltrd recover -able, µg/L (01090)
Nov 13...	--	--	--	--	--	--	--	--	--	--	--	--
Feb 07...	<1.2	359	--	.70	129	--	<.010	--	.51	E.07	<.02	--
Jun 11...	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	--	--	<.08	--	--	<.010	--	<.20	--	--	--	<1.8
12...	<1.2	300	--	1.77	48.4	--	<.010	--	.33	.10	<.02	--
												3.5

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 7

[Remark codes: <, less than; E, estimated.]

Date	2,6-Di-ethyl-aniline	2Chloro-2'-6'-diethyl acetanilide	CIAT, water, wat flt	2-Ethyl-6-methyl-chloro-aniline	3,4-Di-chloro-aniline	3,5-Di-chloro-aniline	4-Chloro-2methyl phenol, water, filtrd,	Aceto-chlor, water, filtrd,	Ala-chlor, water, filtrd,	alpha-Endosulfan, water, filtrd,	Atra-zine, water, filtrd,	Azin-phos-methyl				
	1-Naph-thol, water, filtrd	0.7u GF	0.7u GF	0.7u GF	(49295)	(82660)	(61618)	(04040)	(61620)	(61625)	(61627)	(61633)	(49260)	(46342)	(34362)	(39632)
Jun 11...	<.04	<.006	<.010	E.015	<.010	<.006	<.008	<.005	.031	.011	<.006	.047	<.04			

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 7

[Remark codes: <, less than; E, estimated.]

Date	Azin-phos-methyl, water, filtrd	Ben-flur-alin, water, filtrd	Car-baryl, water, filtrd	Carbo-furan, water, filtrd	Chlor-pyrifos	Chlor-pyrifos	cis-Permethrin	cis-Propiconazole	Cyana-zine, water, filtrd,	Cyflu-thrin, water, filtrd,	Lambda-Cyhalothrin, water, filtrd,	Cyper-methrin, water, filtrd	DCPA, water, filtrd			
	0.7u GF	0.7u GF	0.7u GF	0.7u GF	(82686)	(82673)	(82680)	(82674)	(61636)	(38933)	(82687)	(79846)	(04041)	(61585)	(61595)	(61586)
Jun 11...	<.120	<.010	<.060	<.020	<.06	<.005	<.011	<.006	<.020	<.016	<.004	<.014	<.004			

01411400 FISHING CREEK AT RIO GRANDE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 7

[Remark codes: <, less than; E, estimated.]

Date	Desulf- inyl- fipro- nil, water, fltrd, μg/L (62170)	Diazi- non, water, fltrd, μg/L (39572)	Dicro- tophos, water, fltrd, μg/L (38454)	Diel- drin, water, fltrd, μg/L (39381)	Dimeth- oate, water, 0.7u GF (82662)	Disulf- oton sulfone, water, fltrd, 0.7u GF (61640)	Disul- foton, water, fltrd, 0.7u GF (82677)	Endo- sulfan sulfate, water, fltrd, 0.7u GF (61590)	EPTC, water, fltrd, μg/L (82668)	Ethion monoxon, water, fltrd, μg/L (61644)	Ethion, Ethion, water, fltrd, μg/L (82346)	Etho- prop, water, fltrd, 0.7u GF (82672)	Fenami- phos sulfone water, fltrd, μg/L (61645)
Jun 11...	<.012	<.005	<.08	<.009	<.008	<.01	<.04	<.022	<.002	<.02	<.006	<.047	<.053

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 7

[Remark codes: <, less than; E, estimated.]

Date	Fenami- phos sulf- oxide, water, fltrd, μg/L (61646)	Fenami- phos, water, fltrd, μg/L (61591)	Desulf- inyl- fipro- nil amide, wat flt (62169)	Fipro- nil sulfide, water, fltrd, μg/L (62167)	Fipro- nil sulfone, water, fltrd, μg/L (62168)	Fipro- nil, water, fltrd, μg/L (62166)	Fonofos water, fltrd, μg/L (04095)	Hexa- zinone, water, fltrd, μg/L (04025)	Ipro- dione, water, fltrd, μg/L (61593)	Isofen- phos, water, fltrd, μg/L (61594)	Mala- xon, water, fltrd, μg/L (61652)	Mala- thion, water, fltrd, μg/L (39532)	Meta- laxyl, water, fltrd, μg/L (61596)
Jun 11...	<.20	<.03	<.029	<.013	<.024	<.020	<.010	<.008	<.01	<.008	<.020	<.016	<.007

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 5 of 7

[Remark codes: <, less than; E, estimated.]

Date	Methid- athion, water, fltrd, μg/L (61598)	Methyl para- oxon, water, fltrd, μg/L (61664)	Methyl para- thion, water, 0.7u GF (82667)	Metola- chlor, water, fltrd, μg/L (39415)	Metri- buzin, water, fltrd, μg/L (82630)	Moli- nate, water, fltrd, 0.7u GF (82671)	Myclo- butanil water, fltrd, μg/L (61599)	Oxy- fluor- fen, water, fltrd, 0.7u GF (61600)	Pendi- meth- alin, water, fltrd, μg/L (82683)	Phorate oxon, water, fltrd, μg/L (61666)	Phorate water, fltrd, 0.7u GF (82664)	Phosmet oxon, water, fltrd, μg/L (61668)	Phosmet water, fltrd, μg/L (61601)
Jun 11...	<.004	<.01	<.008	.030	<.012	<.003	<.010	<.006	<.012	<.03	<.040	<.05	<.008

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01411400 FISHING CREEK AT RIO GRANDE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 6 of 7

[Remark codes: <, less than; E, estimated.]

Date	Prometon, water, filtrd, μg/L (04037)	Prometryn, water, filtrd, μg/L (04036)	Propyzamide, water, filtrd, 0.7u GF μg/L (82676)	Propanal, water, filtrd 0.7u GF μg/L (82679)	Propargite, water, filtrd 0.7u GF μg/L (82685)	Simapazine, water, filtrd 0.7u GF μg/L (04035)	Tebuthiuron, water, filtrd 0.7u GF μg/L (82670)	Tefluthrin, water, filtrd, 0.7u GF μg/L (61606)	Terbufos, oxon sulfone, water, filtrd, 0.7u GF μg/L (61674)	Terbu-fos, water, filtrd 0.7u GF μg/L (82675)	Terbutyl-azine, water, filtrd, 0.7u GF μg/L (04022)	Thiobencarb, water, filtrd, 0.7u GF μg/L (82681)	trans-Propiconazole, water, filtrd, μg/L (79847)
Jun 11...	.01	<.006	<.004	<.006	<.04	E.007	E.06	<.003	<.04	<.02	<.01	<.010	<.02

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO
SEPTEMBER 2008

Part 7 of 7

[Remark codes: <, less than; E, estimated.]

Date	Tributrophos, water, filtrd, 0.7u GF μg/L (61610)	Trifluor-alin, water, filtrd 0.7u GF μg/L (82661)	Dichloro- vos, water, filtrd, 0.7u GF μg/L (38775)
Jun 11...	<.035	<.009	<.01

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	pH bed sedimnt std (70310)	Ammonia + org-N, bed sed total, mg/kg (00626)	Phosphorus, bed sedimnt total, mg/kg (00668)	Inorganic Total carbon, bed sedimnt total, g/kg (00693)	Arsenic bed sedimnt recover total, ug/g (00686)	Cadmium bed sedimnt recover -able, ug/g (64847)	Chromium ium, bed sedimnt recover -able, ug/g (01028)	Cobalt bed sedimnt recover -able, ug/g (01029)	Copper, bed sedimnt recover -able, ug/g (01038)	Iron, bed sedimnt total digest, ug/g (01170)	Lead, bed sedimnt recover -able, ug/g (01052)	
Aug 12...	1140	7.70	20	270	6.8	<.2	.2	.020	1.2	.6	9	540	7.0

01411400 FISHING CREEK AT RIO GRANDE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 4

[Remark codes: <, less than; E, estimated.]

Date	Manganese, ug/g (01053)	Mercury bed sedimnt (71921)	Nickel, bed sedimnt (01068)	Selenium, bed sedimnt (64848)	Zinc, bed sedimnt (01093)	1,2-Dimethyl-naphthalene, bed sed <2 mm, ug/kg (49403)	1,6-Dimethyl-naphthalene, bed sed <2 mm, ug/kg (49404)	1Methyl-9H-fluorophenanthrene, bed sed <2 mm, ug/kg (49398)	1-Methylpyrene, bed sed <2 mm, ug/kg (49410)	236Tri-methyl-naphthalene, bed sed <2 mm, ug/kg (49388)	2,6-Dimethyl-naphthalene, bed sed <2 mm, ug/kg (49405)	2-Ethyl-naphthalene, bed sed <2 mm, wsv nat (49406)
Aug 12...	18	<.007	.6	<.1	9.7	<50	<50	<50	E3	<50	E5	<50

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 4

[Remark codes: <, less than; E, estimated.]

Date	2-Methyl-anthra-[def]-cene, bed sed ug/kg (49435)	4H-Cyclo-lopenta-phenan-threne, bed sed ug/kg (49411)	9H-Fluor-naphthalene, bed sed ug/kg (49399)	Ace-naphthylene, bed sed ug/kg (49429)	Ace-naphthylene, bed sed ug/kg (49428)	Anthra-cene, bed sed <2 mm, wsv nat field, <2 mm, ug/kg (49434)	Benzo-[a]-anthra-cene, bed sed <2 mm, wsv nat field, <2 mm, ug/kg (49436)	Benzo-[a]-pyrene, bed sed <2 mm, wsv nat field, <2 mm, ug/kg (49389)	Benzo-[b]-fluor-anthene, bed sed <2 mm, bed sed <2 mm, ug/kg (49458)	Benzo-[ghi]-peryl-anthene, bed sed <2 mm, bed sed <2 mm, ug/kg (49408)	Benzo-[k]-fluor-anthene, bed sed <2 mm, bed sed <2 mm, ug/kg (49397)	Chrysene, bed sed <2 mm, wsv nat field, <2 mm, ug/kg (49450)	Dibenzo-[a,h]-anthra-cene, bed sed bed sed bed sed ug/kg (49461)
Aug 12...	<50	E3	<50	E1	E3	E4	E14	E17	E20	E22	E9	E14	<50

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 4

[Remark codes: <, less than; E, estimated.]

Date	Fluor-anthene, bed sed ug/kg (49466)	Indeno[1,2,3-cd]pyrene, bed sed ug/kg (49390)	Iso-phorone, bed sed ug/kg (49400)	Naphthalene, bed sed ug/kg (49402)	p-PCBs, bed sed ug/kg (39519)	Phenanthrene, bed sed ug/kg (49451)	Phenanthrene, bed sed ug/kg (49409)	Phenanthrene, bed sed ug/kg (49393)	Pyrene, bed sed ug/kg (49387)	Bed sediment, dry svd ug/kg (80164)
Aug 12...	E29	E18	<50	E2	51.0	<50	E10	<50	E24	.5